

Protection of environment and need of water conservation in the world.

Author: Captain Vartul Dixit

Associate Professor (Nautical Science)

Indian Maritime University, Navi Mumbai Campus.

Abstract: The theoretical study and implementation of study can improve air quality specially in dense cities in world. The motivation and initiatives can bring the changes in the development to environment friendly development. Tree plantation should be made a holy work for each citizen so that mass momentum can contribute to improve the air quality. Water conservation is also extremely important for the world specially in arid region of the earth and generally in all over.

Key Word: Protection of environment, development of water bodies, water conservation, arid regions, green world.

Main Text: The conservation of healthy green environment is the need of time. In the fast development emission of Carbon dioxide gas, Nitrogen oxide gas, Sulphur oxide gas, Methane gas and presence of particle matters are also present in the environment. Industries and vehicles are important need for human as human needed products and conveyance to travel from one part of nation to other part in nation. Industries

and automobile use causes emission. Counter control measure are required to curtail fossil fuel as far as possible and substitution of electric (battery power), solar power, CNG etc must be encouraged. Carbon dioxide gas is a asphyxiating gas and it can cause rapid breathing disorder, rapid heart beat during suffocation and loss of life in the acute suffocation (1 Professor Dr. Victor Manuel Ferreira and professor Dr. Maraterra da Silva M: year 2021: Special issue: Carbon dioxide and air pollution). Burning of Carbonaceous material can create unwanted Carbon dioxide saturation. By positive human intervention world can change the situation.

Sulphur emission is also extremely harmful. Burning of fossil fuel in power plants etc causes the Sulphur emission. Sulphur emission is harmful to environment. Sulphur can cause shortness of breath in human body. It can reduce lungs breathing capacity. It can create big health issues to Asthmatic patient.

Nitrogenous oxide gas emission is common from diesel generators, power plants. Nitrous gas is a harmful gas for Mucous Membrane,

lungs and irritating to skin and eye.

Methane gas produced in oil fields and used as fuel is also harmful gas. It is a highly flammable gas and can be cause of accidental fire or explosion (2 Haradhan Kumar Mohajan, year June 2012, *Dangerous effect of Methane gas in the environment*). Methane is a colourless, odourless, less soluble in water and highly flammable gas which is also the cause of concern for human health.

Harmful nano-particle, micro-particle and tiny size pollutant are the another problematic constituent contamination in the environment. Dust, Lead, Sea salt particles, Black solid Carbon, solid secondary sulphate particles, Iron dust are some of the particles easily contaminating the environment. These harmful particles suspended in the air is also called as particulate matters. The particulate matters causes irritation to Mucous Membrane, infection to lungs and harm to breathing system. Burning of Carbonaceous material causes not only Carbon dioxide emission but also suspension of solid Carbon dust into the air (3 Daellenbach, K.R., Uzu, G., Jiang, J. *et al*, year 2020, Sources of particulate-matter air pollution and its oxidative potential in Europe. *Nature* 587).

Lead particle in air is a disaster for the human breathing system. Lead inhaled slowly goes into

blood stream and causes Kidney failure, heavy metal poisoning, failure of Nervous system and in extremely high contamination of blood can cause loss of consciousness or death. Lead present in fossil fuel is a primary source of lead contamination in the air.

Solution to the problem: Author strongly finds a balance in development sustainable with improvement in the air quality. Let Industry grow with green manner, let industry be away from residential areas. Exhaust height of emission should be preferable 400meter or more. High height will cause the emission to disperse in the air at substantial high level and resulting no ill effect on the human body. No smoke should bypass from any source of industry at low level. All industrial manufacturing unit which involves emission should be at safe distance, recommended minimum 10 kilometer from the outer reach of city borders. Industrial plant must be free from emission defects as leakages of gases can create ineffectiveness in controlling the emission. Gas cleaning scrubber towers can wash down the harmful gases is another control measure for mitigating the emission level. Vehicular Pollution should be controlled by curtailing use of fossil fuel in the automobile sector. Modern design of vehicles engines are capable to use

electric drive force to run the vehicle without consumption of fossil fuel. A systematic annual goal can make this world a wonderful green earth. Sustainable and efficient development is very important in environment protection. Another method of avoiding Diesel oil was to use petrol, and avoid petrol is to use compressed natural gas called CNG. Electric battery operated e-vehicles are good alternatives to control pollution. Advance research in automobile sector must find out how e-vehicle can generate even high horse power to run the engine at high revolution and can cop up the need of good speed in the vehicles. Use of SOLAR power driven vehicle, use of photo electric diode and cell should be made available to run the vehicle in storing SOLAR energy into battery and then running vehicle from same. Hydrogen gas driven technology should advance to substitute the fossil fuel consuming engines. Author is strongly oversee the future technologies depending more in e-vehicles (4 *Mitchel L. House and David J Wright, year 2019, International journal on electric and hybrid vehicle: health benefits of electric vehicle*).

Ship, bus, car, truck, Light motor vehicle, Heavy motor vehicle all should adopt to new technologies for protection of environment.

Green Earth is extremely important therefore tree plantation is extremely important not only in the rural region but also in the cities. parallel to colonies in road sides, in parks, in gardens a sequential row of trees are extremely important. Each college, University campus, Government offices, Hospitals, Play grounds must make tree plantation. Each human must feel a sense of responsibility to contribute in the plantation of tree. Tree like Peepal(ficus religiosa), Bargad (Ficus benghalensis) known as Banyan tree can give immense oxygen in the environment these tree not only absorb Carbon dioxide but also gives cool breeze to human body. Tree plantation should be a continuous process in making the earth green. Fruit bearing tree will give oxygen to human race and also will give them natural vitamins to live longer. Saving of forest and development of forest even in arid region is good as it will improve air quality.

Pollution in water and soil also should be controlled in the world. Domestic waste like waste from food, plastic, asbestos, e-waste is very harmful therefore controlling of waste and waste management is extremely important. Good quality of potable water is very important therefore development of water bodies are very important. Human should develop lake, ponds, wells,

water tanks in ground to collect the rain, drizzle water. Rain water drains out to sea through drainage system is not going to increase the level of ground water therefore rain water harvesting is very important. Saving of rain water in lake, pond and in the ground tank is extremely important because it serves the need for irrigation and also for drinking. Conservation of rivers is also very important, human should never make any contamination in the rivers, keep river water, lake water, pond water in so good condition that even it can be used for drinking. Cleaning of river water, collection of debris from water body and throwing any garbage in water should be stopped.

pollution and its oxidative potential in Europe. *Nature* 587.

- 4 Mitchel L. House and David J Wright, year 2019, *International journal on electric and hybrid vehicle: health benefits of electric vehicle*.

● Citation

- 1 Professor Dr. Victor Manuel Ferreira and professor Dr. Mara teressa da silva M: year 2021: *International journal of environmental research and public health, Special issue: Carbon dioxide and air pollution*.
- 2 Haradhan Kumar Mohajan, year June 2012, *International journal of economic and political integration, Dangerous effect of Methane gas in the environment*.
- 3 Daellenbach, K.R., Uzu, G., Jiang, J. et al, year 2020, *Nature, Sources of particulate-matter air*